

DESIGN AND COMMUNICATION: PART 2 (mousetrap construction)

Focus:

The goal of this lab is to construct a paper mouse trap from a set of instructions; then confirm its efficacy.

Overview:

Producing assembly instructions for complex devices can be very difficult. It is often necessary to use a mix of diagrams and explanation to step a reader through an assembly process. What vocabulary can you use? How do you unambiguously represent three-dimensional objects or procedures with two-dimensional diagrams? How much explanation is necessary? What can one assume the reader will already know? In this lab, we will discover how well these questions are answered.

Procedure:

Attempt to construct a mousetrap from the instructions. As you work, critique the instructions. (You can write directly on the instruction sheet. This will be your lab report.) Indicate where the instructions were ambiguous or unclear. Edit the instructions to show how they could have been clearer. If it is possible to construct the mousetrap from the instructions, test the mousetrap to make sure the design works. Roll a ping-pong ball into the trap. Confirm that the ball will not fall out if the trap is tipped or shaken. Finally, on a scale from 0 to 10, grade the quality of the design and the instructions.